

North Dakota House Political Subdivisions Committee Hearing: HB1323  
February 4, 2021  
Written Testimony of Edward F. Fogarty, III

Chairman Dockter and Vice-Chairman Pyle thank you for this opportunity to testify regarding HB1322. As you may know, much of the legislature is quite familiar with my medical practice, research and academic teaching endeavors in service to our state for the last 22 years since my initial internship with UND at Meritcare and subsequent faculty appointment with the University of North Dakota School of Medicine in the Department of Radiology while at Medcenter One. I currently have my own medical practice under MoPlatte Hyperbarics and MoPlatte Medical Arts through which I practice various lines of integrative medicine, diagnostic radiology and limited interventional radiology.

Our nation's Radiologists are leaders in Public Health and Translational Medicine as a Corps of the physicians of these Great United States of which our specialty has a particularly important role in national defense matters / biosecurity issues by being the sentinels of diseases such as COVID19 in their expression on various modalities of imaging such as CT scans, bedside ultrasound, MRI and plain radiography. With HB1323, I feel our workforce productivity is on the line and our social civility. I will provide various key scientific principles as to why our state government as a "representative whole" through the political process should be able to find the right balance between protecting our economy as well as our collective health in matters of infectious diseases through the great discourse that our democratic republic affords.

I am testifying as neutral and present my self as a trusted physician who's medical innovations have saved the lives of many North Dakotans since my departure from Omaha and Residency training at Creighton University. For your astute deliberations on this complex issue, I hope some of you will return to my many emails to you regarding some of these matters from 11/17/2020 into these first months of 2021. I did have private emails with Senator Tim Mathern regarding how best to implement Senate Rules on COVID19 precautions in the last months of 2020. At that time, I did propose to him many solutions. For the ultimate safety of his

colleagues at that time, I suggested complete off-site legislative work would be the safest, especially with the age bracket of our ND Senators. However, a working legislative body cannot perform its duties in full implementation from afar. Therefore, I did suggest that N95 RESPIRATORS which we use in medicine in our handling of tuberculosis patients would be the best split in costs and respiratory health matters translating from infectious disease protocols that we have long established in the ND medical community as we have had a longstanding higher than average number of citizens with tb over the last 50 years.

Respirators are different of course from surgical masks that I use in my rural interventional radiology and pain management procedures here in Bismarck and elsewhere across the northern plains. I hold licensure in many states, but have actively practiced the most on the ground in ND and Nebraska and am recruited weekly to help in many other hospitals in Iowa, PA, NJ, GA and OK among others to help the shorthanded situation we have in delivering pain management services and image guided breast biopsies or many other surgical procedures in concert with general surgeons and cardiothoracic surgeons (CT guided-lung biopsies) and other physicians such as our great array of Family Practice physicians who will refer to me or other radiologists in the state many thyroid biopsies and occasion abscess drainages.

Starting 45 years ago, the surgical and interventional proceduralists of the world of medicine began to look at the utility of surgical masks for post-operative infection rates. What the world's scientific and medical literature has shown as housed on the NIH Pub Med databases is frankly astounding. Maskless surgery with DECREASED SPEECH in the OR lowers post-operative infections. There was a landmark piece in the British Medical Journal in 2015 that also showed cloth masks in healthcare workers increases "influenza like infections" in those healthcare workers who wore them. SARS CoV1 and MERS research on cloth/surgical masks also seemed to indicate ineffectiveness. These references have already been given to various branches of North Dakota government.

In the fall of 2020, I signed and still agree with the tenets of the Great Barrington Declaration: <https://gbdeclaration.org>. This was a collaborative policy statement brought forth by the efforts of the American Institute for Economic Research: <https://www.aier.org/article/aier-hosts-top-epidemiologists-authors-of-the-great-barrington-declaration/>. As one of our national leaders in dealing with the epidemic of PTSD/TBI connected to our brave veterans through my research work with Dr. Paul G. Harch of the Louisiana State University and with my intimate knowledge of neurofunctional imaging techniques in Diagnostic Radiology, I believe we have wasted billions of dollars nationally on this debate over masks while not implementing sound adjunctives to improve our population's general health and well being. In the last quarter of 2020, ND State Agricultural Commissioner Doug Goehring and the committee for the CARES ACT granting process graciously funded a North Dakota Integrative Medicine project for the development of adjuncts such as hyperbaric oxygen therapy and nutraceutical approaches to "mask up" our very cells with agents that shut down viral replication. Mr. Goehring's position used to entail Ag and Labor by the way until a little over 50 years ago.

Our workforce across ND has many elements that lead to masks increasing the risk of infections over time as well as dropping performance in the more strenuous arenas of occupational life. The papers cited below are just the tip of the iceberg on how our long term economic output and health index will slide with increasing use of face masks. The most important of these from my Sports Medicine practice perspective is how blood chemistry changes with exercise while wearing a mask for COVID19 "protection" - surgical masks are switched every hour and this decreases the fomite effect. I am currently rehabbing the shoulder of an injured St. Mary's wrestler with mild hyperbaric techniques and glutathione amino acid precursors so he may participate in the state tournament in Fargo later this month, so these matters of bioengineering speedy recoveries and a more productive workforce are not just "anecdotal" - the Fargo Hyperbaric Center which I networked into existence has shown all of us in ND how powerful we are with the right mix of gases, physics and nutrients in the war on disease. Our mitochondria are the "agents of fracking DNA" for the defense of our cells

against foreign invaders such as viral illnesses, bacteria and the frequent injuries of occupational nature which I suffered this week as well in my medical/wellness practice here in ND. Our Congressional Delegation has moved mountains in these “bioengineering” of the recovery of our soldiers with the recent passage of a bill signed by Donald J. Trump for additional care innovations increasing the use of HBOT in PTSD for our veterans.

Our Hyperbaric Medicine colleagues in America and in Israel are showing in spectacular fashion how important increased oxygen gradients are to our immune systems for COVID19 and reversal of “immunosenescence” or aging of the immune system. When we put a mask on for hours per day, we lose a small percentage of our daily “bread” of oxygen in service to our creative, professional, educational, occupational and general workplace endeavors. This is physiologically rendered by an increase of a small percentage of CO<sub>2</sub> by increasing the dead space from gas exchange at the alveoli and the open atmosphere. We also have increased “drag” or friction in the system when masks are worn in athletes or hard working elements of our workforce in any industry. This added resistance decreases the oxygen gradient levels at the muscle, myocardial or brain cell level. The acid-base chemistry shift from slightly increased CO<sub>2</sub> in the bloodstream impacts people variously but in those with preexisting pulmonary function declines from “farmers lung” or other occupational hazards sustained on the farm or ranch or in coal country or construction realms can lead to chronic headaches and symptoms of pulmonary distress, and even anxiety that is recurrent with association to the workplace where it becomes a risk of formal PTSD as a psychiatric diagnosis.

Most importantly, regardless of all the physiological considerations above and others which you may freely ask me about after my testimony, I am gravely concerned about our children, including mine who are seniors at Bismarck High School. Some of you may have seen Ellie and Riley featured in a CBS Evening News piece by Norah O’Donnell this fall as a twin Homecoming King and Queen couple. This media piece really stresses the impactful stress release that many had in seeing some semblance of normalcy in the midst of this terrible pandemic of 2020-21. Our 3 pillars of government combined with the 4th estate of media/

journalism must work together better on these matters of the entire economic picture and impacts of policy on our state and its economic well-being which directly ties to our psychological well being. This has a major derivative impact into our healthcare systems of course. We have lost too many lives of the physically healthy in ND to pandemic despair, some of these children and young adults are reacting with suicide to the loss of employment and the stresses of parenting during this global event of PTSD brokered in large part by well meaning people trying to put out a fire of cytokine storming spreading across the globe like wild fire. We must forgive each other and our leadership in these missteps and forge a new set of protocols in governance to deal with the coming waves of the ever changing SARS-CoV2 virus.

Returning to my base foundational professional ties to Radiology, I do believe the best answer to this political crisis for our various governmental enterprises as well as many businesses is to consider implementation of more hygiene related protocols and germicidal devices at every threshold and doorway in North Dakota. In there early part of the pandemic, Columbia Univerisity's Radiological Sciences department published a revelation from the bandwidths of sunshine by showing that 222nm UVC wavelengths are a light form that is potent against many infectious agents including CORONAVIRUSES. These lights, if installed on a business by business basis or at "public access" points of government could provide a much better level of protection than masks alone or maskless interactions in my professional opinion. The installation of such lighting equipment in restaurants in the kitchen and over the salad bar and within pubs and bars themselves would attract the clientele on both sides of this debate, I believe. The purple/pink hues at our sports stadiums and in the locker rooms of our athletes would also help with the MRSA infection crisis that exists for our wrestlers and other contact sports athletes.

In summary, I believe through the political process that this committee and the entire legislature might be able to get behind this bill with the various pro-business and pro-health safety advocates who came together during the last biennium to unanimously support the house bill for UND to advance the science of hyperbaric medicine in regards to the acute

treatment of concussion in Fargo's Healing with Hyperbarics. I would hazard a guess that Gary Tharaldson might become a great champion of 222 nm UVC light installations across the Tharaldson Hospitality complex to reassure his hotel patrons that we are doing all we can to decrease the spread of COVID19 via the understanding of the interplay of physics in human biology. Thank you for your time and I will answer any questions as honestly as I can with my Hippocratic knowledge base in service to humanity. I have no conflicts of interest in the realm of UVC lighting, but obviously have a mission for increasing oxygen gradients in safe manners across all American citizens for the enrichment of our mental capacities and work output.

Thank you again for the privilege of testifying today as there are other states in our union that do not have such opportunities for their citizens. Prayers to all of you on this committee and in the house in our collective endeavors of making ND Nice again while pioneering new concepts in pandemic management at the public policy level.

Respectfully and thoughtfully with Hippocratic intent for our political body,

Ted Fogarty, MD

Radiological Science: <https://pubmed.ncbi.nlm.nih.gov/?term=222+nm+covid>

Exercise Science: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7306735/pdf/main.pdf>

Hyperbaric Science: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7306735/pdf/main.pdf>

Hyperbaric Medicine COVID19 Phase 1: <https://www.clinicaltrials.gov/ct2/show/NCT04332081>

OXYGEN/PRESSURE GRADIENTS: <https://abc7ny.com/place/fairfield-county/>

Begin forwarded message:

**From:** "Haugen, Shelley K." <[skhaugen@nd.gov](mailto:skhaugen@nd.gov)>  
**Date:** October 29, 2020 at 9:37:00 AM CDT  
**To:** "Fogarty, Ted" <[ted.fogarty@ndus.edu](mailto:ted.fogarty@ndus.edu)>  
**Subject:** RE: Science / surgical masks

Thanks Ted – this has been forwarded to the interim State Health Officer.

Shelley Haugen  
Constituent Services

701.328.2208 • [skhaugen@nd.gov](mailto:skhaugen@nd.gov) • [www.governor.nd.gov](http://www.governor.nd.gov)



**From:** Fogarty, Ted <[ted.fogarty@ndus.edu](mailto:ted.fogarty@ndus.edu)>  
**Sent:** Thursday, October 29, 2020 3:03 AM  
**To:** -Info-Governor's Office <[governor@nd.gov](mailto:governor@nd.gov)>  
**Cc:** -Info-Dept. of Agriculture <[ndda@nd.gov](mailto:ndda@nd.gov)>; -Info-State Treasurer <[treasurer@nd.gov](mailto:treasurer@nd.gov)>  
**Subject:** Science / surgical masks

**CAUTION:** This email originated from an outside source. Do not click links or open attachments unless you know they are safe.

"Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Personal Protective and Environmental Measures." Published in: "Emerging Infectious Diseases, Vol.26, No. 5, May 2020." (CDC.)

"Here, we review the evidence base on the effectiveness of nonpharmaceutical personal protective measures and environmental hygiene measures in non-healthcare settings and discuss their potential inclusion in pandemic plans. Although mechanistic studies [\*] support the potential effect of hand hygiene or face masks, evidence from 14 randomized controlled trials of these measures did not support a substantial effect on transmission of laboratory-confirmed influenza. We similarly found limited evidence on the effectiveness of improved hygiene and environmental cleaning."

Here are quotes from pages 970-972 of the review: "In our systematic review, we identified 10 RCTs [randomized controlled trials] that reported estimates of the effectiveness of face masks in reducing laboratory-confirmed influenza virus infections in the community from literature published during 1946–July 27, 2018. In pooled analysis, we found no significant reduction in influenza transmission with the use of face masks..."

"Disposable medical masks (also known as surgical masks) are loose-fitting devices that were designed to be worn by medical personnel to protect accidental contamination of patient wounds, and to protect the wearer against splashes or sprays of bodily fluids... There is limited evidence for their effectiveness in preventing influenza virus transmission either when worn by the infected person for source control or when worn by uninfected persons to reduce exposure. Our systematic review found no significant effect of face masks on transmission of laboratory-confirmed influenza."

"In this review, we did not find evidence to support a protective effect of personal protective measures or environmental measures in reducing influenza transmission."

"We did not find evidence that surgical-type face masks are effective in reducing laboratory-confirmed influenza transmission, either when worn by infected persons (source control) or by persons in the general community to reduce their susceptibility..."

SOURCE:

[https://wwwnc.cdc.gov/eid/article/26/5/19-0994\\_article](https://wwwnc.cdc.gov/eid/article/26/5/19-0994_article)

<https://wwwnc.cdc.gov/eid/article/26/5/pdfs/19-0994.pdf>

(Note the "wwwnc" — which is correct. It is not "www".)

FYI: check out [aircraftHBOt.org](http://aircraftHBOt.org) for MCI / disaster plan....surgical masks are not Very effective in reducing spread of viruses .... 222nm UVC light arrays are probably the best/safest form of germicidal light waves that we have available which should be in all of our airports, hospitals, government buildings. Pretty cool / simple technology, just like hyperbaric vessels which are the only device that really works with severe covid19.

<https://m.soundcloud.com/1150kknw/lift-your-spirits-radio-05-29-20-bernadette-pajer-hbot>

Edward F. Fogarty, MD  
Assistant Professor  
UND SOM  
Department of Radiology  
Chairman, 2006-2019

<https://www.usatoday.com/story/news/nation-now/2017/07/20/toddlers-brain-damage-reversed-treatment-after-near-drowning/496134001/>

<https://www.lsuhs.edu/newsroom/Veterans%20Study%20Reports%20Reduction%20in%20Suicide%20Ideation%20after%20HBOT.html>

Sent from my iPhone

On Sep 24, 2020, at 8:48 AM, Fogarty, Ted <[ted.fogarty@ndus.edu](mailto:ted.fogarty@ndus.edu)> wrote:

“Furthermore, a mask often becomes a virus collector during repeated breathing activities, particularly when its outer surface is exposed to contaminated droplets [8,16].”

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7426537/>

<https://m.soundcloud.com/1150kknw/lift-your-spirits-radio-05-29-20-bernadette-pajer->

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2493952/pdf/annrcse01509-0009.pdf>

<https://pubmed.ncbi.nlm.nih.gov/1157412/>

<https://europepmc.org/article/med/7379387>

<https://onlinelibrary.wiley.com/doi/abs/10.1002/ccd.1810170306>

<https://europepmc.org/article/med/11924291>

<https://link.springer.com/article/10.1007/BF01658736>

<https://journals.sagepub.com/doi/pdf/10.1177/0310057X0102900402>

<https://europepmc.org/article/med/11760479>

<http://www.advancesinpd.com/adv01/21Figueiredo.htm>

<https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1445-2197.2009.05200.x>

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD002929.pub2/full>

<https://journals.sagepub.com/doi/pdf/10.1177/0141076815583167>